

PTO/SB/08A (02-03)

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Sheet 1

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Application Number	10/717,742
Filing Date	November 20, 2003
First Named Inventor	Thomas Wayne Ray et al.
Art Unit	3672
Examiner Name	Unassigned
Attorney Docket Number	1301-1160

U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
[Signature]		US- 5,169,887	12-08-1992	Snow et al.	
		US- 5,385,984	01-31-1995	Blohm et al.	
		US- 5,552,469	09-03-1996	Beall et al.	
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		Country Code ² Number ³ Kind Code ⁴ (if known)				
[Signature]		EP 1 211 282 A1	06-05-2002	Herrmann et al.		
		DE 100 59 237 A1	06-20-2002	Herrmann et al.		
		WO 02/079308 A1	10-10-2002	Bremser et al.		

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		Number-Kind Code ² (if known)			
		US- 6,090,734	07-18-2000	Tsipursky et al.	
		US- 6,107,387	08-22-2000	Kaylo et al.	
		US- 6,124,365	09-26-2000	Lan et al.	
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		US- 6,461,423	10-08-2002	Beall et al.	
		US- 6,462,122	10-08-2002	Qian et al.	

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OTHER PRIOR ART—NON PATENT LITERATURE DOCUMENTS

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		BUC SLAY et al.; "What Engineers Need to Know About Seals and Sealing Technology"; Energy Rubber Group - 2003 Fall Technical Symposium; September 16, 2003; pages 1-24.	
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		"Nanomaterials - A Big Market Potential"; Chemical Week; October 16, 2002; pages 17-20.	
		"Organic/Inorganic Hybrid Polymer/Clay Nanocomposites"; NASA Tech Briefs; December 2003; page 21.	
		Prof. E.P. GIANNELIS; "Polymer Nanocomposites"; Cornell University; page 1-2.	
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		SUSMITA SADHU et al.; "Acrylonitrile Butadiene Rubber Based Nanocomposites: Preparation and Mechanical Properties"; Presented at a meeting of the Rubber Division, American Chemical Society; Paper No. 42; October 14-17, 2003; pages 1-12.	

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		ABHIJIT BANDYOPADHYAY et al.; "Synthesis and Characterization of Acrylic Rubber/Silica Nanocomposites by Sol-Gel Technique"; Presented at a meeting of the Rubber Division, American Chemical Society; Paper No. 43; October 14-17, 2003; pages 1-20.	
		LIMING DAI et al.; "Polymer and Aligned Carbon Nanotube Nanocomposites"; Presented at a meeting of the Rubber Division, American Chemical Society; Paper No. 39; October 14-17, 2003; pages 1-14.	
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		BO-HYUN KIM et al.; "Nanocomposite of Polyaniline and Na ⁺ - Montmorillonite Clay"; Macromolecules; October 10, 2001; pages 1419-1423.	
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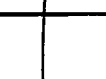

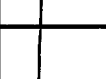


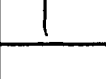
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		Q.H. ZENG et al.; "Molecular Dynamics Simulation of Organic-Inorganic Nanocomposites: Layering Behavior and Interlayer Structure of Organoclays"; ACS Publications; October 6, 2003; 1 page.	

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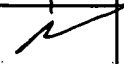
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		S. JOLY et al.; "Organically Modified Layered Silicates as Reinforcing Fillers for Natural Rubber"; ACS Publications; June 14, 2002; 1 page.	
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		"Hybrid Plastics"; POSS Nanotechnology Conference 2002; September 2002; 58 pages.	
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		ERIK ABBENHUIS; "Homogeneous and Heterogeneous Catalysis with POSS"; POSS Nanotechnology Conference 2002; September 2002; 1 page.	
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		LELAND VANE; "Membrane Technology"; POSS Nanotechnology Conference 2002; September 2002; 1 page.	

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Application Number Filing Date First Named Inventor Art Unit Examiner Name Attorney Docket Number	10/717,742
	November 20, 2003
	Thomas Wayne Ray et al.
	3672
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		JUNCHAO HUANG et al.; "Preparation and Properties of Polyimide-POSS Nanocomposites"; POSS Nanotechnology Conference 2002; September 2002; 6 pages.	

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		JOSEPH LICHTENHAN; "Introduction and Welcome; POSS Nanotechnology Conference 2002; September 2002; 2 pages.	
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		ROHIT SHUKLA; "California's Nanotechnology Republic"; POSS Nanotechnology Conference 2002; September 2002; 8 pages.	
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		SHAWN PHILLIPS; "AFRL POSS Nanomaterials"; POSS Nanotechnology Conference 2002; September 2002; 20 pages.	
		BAUDILIO TEJERINA; "POSS - Versatile Materials for Scientific & Technological Applications"; POSS Nanotechnology Conference 2002; September 2002; 14 pages.	

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







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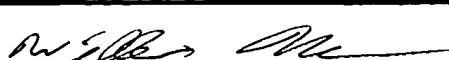
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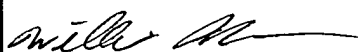
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